

Now if this Table be compared with the 6th Scheme, you will there see the constitution of each Colour, as to its Ingredients, or the original Colours of which it is compounded, and thence be enabled to judge of its intenseness or imperfection; which may suffice in explication of the 4th and 18th Observations, unless it be further desired to delineate the manner how the Colours appear, when the two Object-Glasses are lay'd upon one another. To do which, let there be described a large Arc of a Circle, and a streight Line which may touch that Arc, and parallel to that Tangent several occult Lines, at such distances from it, as the numbers set against the several Colours in the Table denote. For the Arc, and its Tangent, will represent the superficies of the Glasses terminating the interjacent Air; and the places where the occult Lines cut the Arc will show at what distances from the Center, or Point of contact, each Colour is reflected.

There are also other uses of this Table: For by its assistance the thickness of the Bubble in the 19th Observation was determined by the Colours which it exhibited. And so the bigness of the parts of natural Bodies may be conjectured by their Colours, as shall be hereafter shewn. Also, if two or more very thin plates be lay'd one upon another, so as to compose one plate equalling them all in thickness, the resulting Colour may be hereby determined. For instance, Mr. Hook in his *Miscrographia* observes, that a faint yellow plate of Muscovy-glass lay'd upon a blue one, constituted a very deep purple. The yellow of the first Order is a faint one, and the thickness of the plate exhibiting it, according to the Table is $4\frac{1}{2}$, to which add 9, the thick-

ness exhibiting it will be $13\frac{1}{2}$, which is the thickness of the purple of the third Order.

To explain, in the 2d and 3d Observations, the Colours made by the common Axis of vision, those Observations of Rings, and afterwards the Colours of each Order, must be remembered by the obliquity of the Axis, which intercedes the Glasses in the 7th Observation, their Diameter is not the same, but is more oblique. The first Ring, which is reflected by the first surface of red, are therefore the most perfect, at which the Coloured Rings, and the first Ring will be more perfect, its dilatation will be the greater is the obliquity, come of equal extent for the same reason, so much dilated by the rays, as to become the red, that is, the Rings. And the first must be coincident with the white Ring. And the dark Rings